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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,651	10/12/2001	Adrian Yap	PD-201032	2068

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EXAMINER

DUNN, MISHAWN N

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 08/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/976,651	Applicant(s) YAP ET AL.	
	Examiner Mishawn N. Dunn	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-15, 17-24, and 26 is/are rejected.
- 7) ☒ Claim(s) 7, 16 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 7-8, filed 7/11/2006, with respect to the rejection(s) of claim(s) 1, 3, 9, 12, 18, and 20 under 35 U.S.C §102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art references.
2. Examiner withdraws objection of claims 2, 6, 15, 19, 23, and 24 in view of newly found prior art references.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1, 2, 3, 6, 9, 12, 15, 18-20, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al. (US Pat. No. 6,5140,554) in view of Iacobelli et al. (US Pat. No. 7,035,335).
2. Consider claim 18. Gordon et al. teaches a set top box (STB) for identifying MPEG picture coding types of a received broadcast or event (col. 5, lines 43-53; fig. 1), comprising: a transport processor operatively connected to a bus and to one or more input ports for receiving a plurality of packets of audiovisual and information data representing said broadcast or event from said input port (col. 4, lines 4-15); a host processor operatively connected to said bus and interacting with the transport processor to process the received packets (fig. 1); and a recording device for digitally recording said received packets for later playback.

Gordon et al. does not teach parsing a payload portion of a particular one of said plurality of received packets to identify the picture coding type in the payload portion.

However, Iacobelli et al. discloses parsing a payload portion of a particular one of said plurality of received packets to identify the picture coding type in the payload portion (col. 17, lines 22-36).

Therefore, it would have been obvious to one with ordinary skill in the art, at the time the invention was made to use, to parse a payload portion of a particular one of said plurality of received packets to identify the picture coding type in the payload portion, in order to locate the start of a video frame.

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3. Consider claim 19. Gordon et al. teaches all the claimed limitations as stated above, except parsing a packet only if a first bit of a header designator of that packet toggles.

However, Iacobelli et al. discloses parsing a packet only if a first bit of a header designator of that packet toggles (col. 13, lines 37-56).

4. Consider claim 20. Gordon et al. teaches the STB wherein a picture is a frame or a field (col. 4, lines 5, 30-31).

5. Consider claim 23. Gordon et al. teaches all the claimed limitations as stated above, except indexing the identified picture coding types, the indexed I-pictures representing flags so as to be located and decompressed in a subsequent playback of, or trick mode operation performed on, the recorded broadcast or event, and wherein the indexed picture types together with the processed packet payloads are forwarded to the host processor that identified the I-pictures to be decompressed and then stores the processed packet payloads in the mass storage device of the STB.

However, Iacobelli et al. discloses indexing the identified picture coding types, the indexed I-pictures representing flags so as to be located and decompressed in a subsequent playback of, or trick mode operation performed on, the recorded broadcast or event, and wherein the indexed picture types together with the processed packet payloads are forwarded to the host processor that identified the I-pictures to be decompressed and then stores the processed packet payloads in the mass storage device of the STB (col. 18, lines 36-53; fig. 14).

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6. Consider claim 24. Gordon et al. teaches the mass storage device is a hard disk drive (col. 4, lines 51-55).

7. Claims 1, 2, 3, 6, 9, 12, and 15 are rejected for the same reasons discussed in the corresponding apparatus claims above.

8. Claims 4, 13, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al. (US Pat. No. 6,5140,554) in view of Iacobelli et al. (US Pat. No. 7,035,335) in further view of Nagata (US Pat. No. 5,974,224) in further view of Chavel et al. (US Pat. No. 6,369,855).

9. Consider claim 21. Gordon et al. and Iacobelli et al. teach all the claimed limitations as stated above, except that the detected picture coding type is compared to stored codes representing intra-coded (I), predictive-coded (P), and bi-directionally predictive-coded (B) picture types, said codes stored in an SDRAM operatively connected to the transport processor.

However, Nagata discloses that the detected picture coding type is compared to stored codes representing intra-coded (I), predictive-coded (P), and bi-directionally predictive-coded (B) picture types (col. 7, lines 22-26). Chauvel et al. further teaches that the codes stored in an SDRAM operatively connected to the transport processor (col. 5, lines 40-41; col. 9, lines 8-9, 62-64; fig. 1B).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, to detect and compare picture coding types, in order to make compression and reproduction more efficient.

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10. Claims 4 and 13 are rejected for the same reasons discussed in the corresponding apparatus claim above.

11. Claims 5, 14, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al. (US Pat. No. 6,5140,554) in view of Iacobelli et al. (US Pat. No. 7,035,335) in further view of Fujinami et al. (EP Pat. No. 0910087 A2).

12. Consider claim 22. Gordon et al. and Iacobelli et al. teach all the claimed limitations as stated above except that the parsing and identifying of picture types is performed as the STB records the incoming broadcast or event.

However, Fujinami et al. discloses the parsing and identifying of picture types is performed as the STB records the incoming broadcast (col. 23, lines 49-53; col. 27, lines 43-50; fig. 37).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, to parse and identify picture types as the STB records the incoming broadcast, in order to increase time efficiency.

13. Claims 8, 10-11, 17, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al. (US Pat. No. 6,5140,554) in view of Iacobelli et al. (US Pat. No. 7,035,335) in further view of Official Notice.

14. Consider claim 8. Gordon et al. and Iacobelli et al. teach all the claimed limitations as stated above, except the presence of an MPEG picture start code in the

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payload portion is indicated by toggling of a bit in a header designator portion of said particular one received packet.

The examiner takes official notice that it is well known to toggle a bit in the header to indicate the presence of a picture start code.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, to indicated the presence of an MPEG picture start code by toggling a bit in the header of the received packet, in order to make the system more efficient.

15. Consider claims 10 and 11. Gordon et al. and Iacobelli et al. teach all the claimed limitations as stated above, except said means for receiving, means for parsing and means for identifying are embodied as any of application specific integrated circuits (ASIC) with on-chip instruction cache and data cache memory, and integrated system peripherals, which represent interrupt, timer, and memory controllers on-chip, including ROM, SDRAM, DMA controllers, packet processors, a crypto-logic unit, a PCI compliant PC port, and parallel inputs and outputs.

The examiner takes official notice that it is well known in the art to embody means for receiving, parsing and identifying as an ASIC with on-chip instruction cache and data cache memory, and integrated system peripherals, which represent interrupt, timer, and memory controllers on-chip, including ROM, SDRAM, DMA controllers, packet processors, a crypto-logic unit, a PCI compliant PC port, and parallel inputs and outputs.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, to provide a chip to receive, parse and identify, in order to improve overall performance.

16. Claims 17 and 26 are rejected for the same reasons as discussed in the corresponding claims above.

Allowable Subject Matter

17. Claims 7, 16, and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

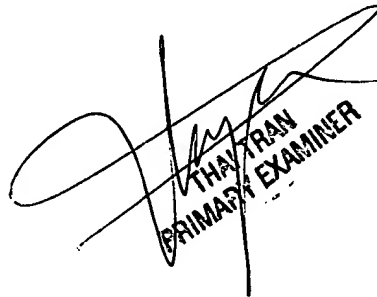
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mishawn N. Dunn whose telephone number is 571-272-7635. The examiner can normally be reached on Monday - Friday 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mishawn Dunn
May 2, 2006



THAI TRAN
PRIMARY EXAMINER